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REMARKS ON THE TREATMENT OF TRACHEITIS, OR CROUP.

By J. A. Allen, M.D., Middlebury, Vt.

[Communicated for the Boston Medical and Surgical Journal.]

In proportion to their number, there are probably few or no diseases, treated in the ordinary method adopted by our best practitioners and advised by our most modern and approved writers, which prove more fatal than the true tracheitis or croup. By true tracheitis or croup, it may be well to premise that, on the present occasion, it is designed to embrace every case in which there exists any embarrassment of the respiration, attended with affection of the voice, and a *cough of a harsh, shrill and ringing character.*

According to the assertion of M. Double, the mortality in this disease, at the present time, amounts to nearly one half of the whole number attacked; and formerly, when its treatment was less understood, it amounted to nearly four fifths. Of 131 cases reported by Dr. Ware, of Boston, Mass., 19 died, being about 1 in six; and for eight years preceding 1840, the city of Philadelphia lost 799 children under 10 years of age, with this disease, and 21 persons over that age. The number of recoveries during this period I have not been able to ascertain, but it is evident the proportion of deaths must have been very great. Dr. Williams has very justly remarked, that "the croup is a most serious disease, and it often baffles the most active measures."

For the first fifteen years of my medical practice, I pursued, in these cases, the common antiphlogistic treatment, and I have every reason to believe with as much success as has been generally attained. I ordinarily used emetics of tartarized antimony, ipecac., the celebrated seneka or hive syrup of Dr. J. R. Coxe, the lobelia inflata, the yellow sub-sulphate of mercury, the proto-chloride of mercury, &c. Of these agents, none have proved more advantageous than the alterative emetico-cathartic, composed of calomel and ipecac. or tartar-emetic. This combination, when used at the onset of the disease, has not unfrequently arrested its progress and speedily restored to health. It is, however, very liable to fail, and so is the use of each and of every combination of these articles, even when aided by the vapor or warm bath; the Scotch snuff cerate, a mixture of lard and the snuff, recommended by the late learned and devoted Dr. Godman, and, subsequently, extolled by Drs. Vanderburgh and Pendleton of New York; vesication, &c. In short, whatever process of

medication was adopted with these agents, a very considerable number of my patients with the croup would succumb. Its frequent fatality led to a more careful consideration of the character of the complaint and of the essential requirements for its removal.

That this affection, except when it is superadded to some other disease, or occurs as an appendage to another complaint by which the system has become already reduced, is inflammatory, there exists no doubt; and that it assumes a specific character, differing essentially from common deep-seated or membranific inflammation, is equally certain. That the disease affects the mucous coat of the larynx, trachea, and sometimes extends into the bronchia, *post-mortem* examinations have demonstrated. The resulting production of an adventitious membrane, differing materially from the product of ordinary inflammatory action, or of the abdominal diphtheritic formation of M. Bretonneau, shows most clearly its specific character.

Its pathological character, therefore, appears to demand for its removal something more than what is required in simple inflammation. Alterative and deobstruent agents are demanded—agents not only to subdue inflammatory action, but to change its character.

Tracheitis has long been regarded a complaint which was subject to frequent relapses. The reason is obvious, because its cure has usually been attempted by agents which were deficient in their alterative powers. Cures accomplished by the use of articles possessing an adequate degree of alterative powers, are more permanent. These seldom relapse.

The root of the common bloodroot, Sanguinaria Canadensis, has long been known to possess a powerful influence over the secernent system. Its alterative and deobstruent property has been experienced in gastric affections, and in chronic diseases of the chylopoietic viscera. It is an efficient and powerful emetic, and this quality, in combination with its alterative character, the influence it exerts over the vascular system, and its peculiar influence on the mucous surface of the fauces and larynx, appear naturally to show its suitableness for the removal of the several varieties of tracheitis. Waiving, however, all pathological and pharmacological considerations, experience has fully confirmed my most sanguine expectations of its value. In the early stage of the disease, the finely powdered bloodroot, administered in quantity sufficiently large to promote full vomiting, generally arrests its progress. If, however, after the emetic operation the complaint be not entirely removed, it will be well to use, in as full doses as the stomach will tolerate without being rejected, a solution of the acetate of sanguinarine, and repeated every two, three or four hours. This solution is very speedily prepared by moderately boiling two or three drachms of the powdered root in about a gill of common vinegar, which may be sweetened with sugar or honey to render it more palatable. If the vinegar be very acid, it may be diluted with water to render it more agreeable, without essentially impairing its property. In the intermediate time, if there remain any febrile action or inflammation of the larynx or trachea, an alterative diaphoretic powder ought to be used. This should be composed of bloodroot, calomel, and

either James's powder, or emetic tartar and opium. And, if there be considerable entonic action, the calomel should be used in sufficient quantity to induce alvine evacuations in the course of twelve, or, at the farthest, twenty-four hours.

Caution is required lest a hyper-catharsis be produced. It is a principle founded on experience, and it is as old as Hippocrates, *that diseases of the respiratory organs do not bear well powerful cathartics.* And, indeed, one of the greatest evils attendant on the ordinary treatment of the croup, is the liability of the required and frequently repeated antimonial emetics to run off by the bowels and produce fatal prostration. More than one instance of this kind has fallen under my own observation. By the bloodroot treatment, this inconvenience is avoided. I have never known it occur, and I have relied on this treatment for the last fifteen years, and during this period I have not lost a patient with this complaint. The number of cases subjected to this treatment I cannot at this moment determine, but at least forty cases have during this time fallen under my care.

The successful medication of tracheitis when the sanguinaria is used as the principal agent, requires adaptation. In the catarrhal variety it is probable this vegetable emetic will in most instances be sufficient alone, and yet the union of a suitable proportion of tartar emetic will more surely remove the complaint; in the spasmodic kind, the addition of an opiate will be demanded; and in the membranous croup, the combination of calomel and the puccoon afford more surety of a favorable result.

The tepid bath will be found a valuable adjuvant in each of the varieties, and in the first, second and even third stages of this affection. Also the narcotic cerate already mentioned.

The use of sanguinaria in tracheitis is not presented to the medical public as novel or unprecedented. Dr. Tully has informed us, in his prize essay on Sanguinaria, published in the American Medical Recorder for January, 1828, that it was successfully used in the croup by Dr. Jehiel Hoadley, of Middletown, Conn., as early as in 1775; that it was subsequently used by Jared Potter, M.D., one of the first physicians in his day in that part of the country; and in 1817, Dr. Ives, of New Haven, stated that the bloodroot given in large doses, sufficient to produce full vomiting, often removes the croup, if administered in the first stages. "It has been given," he remarks, "for many years in the country, some physicians relying wholly on this remedy for the cure of croup." (Vide Bigelow's Medical Botany.)

Dr. Tully, in the essay mentioned, remarks, "the croup has lost most of its peculiar terrors, and may be as often cured as any one of the severer phlogotica." "In the earliest stages of bronchlemmitis membranifica v. tracheitis," he says, "free vomiting with the sanguinaria may be considered as very nearly *a specific*, at least for all ordinary cases."

It is a subject of regret and of not a little surprise, that notwithstanding the utility of the sanguinaria in the treatment of croup has been before the profession for such a length of time, it has not been introduced among other medical agents into our standard works. In Tweedie's Library of Practical Medicine, with notes and additions by W. W. Gerhard, M.D.;

in the foreign Cyclopedia of Practical Medicine, edited by Robley Dunglison, M.D.; and in the most excellent Dictionary of Practical Medicine by I. Copland, edited by the indefatigable C. A. Lee, M.D., no mention is made of the use of sanguinaria in croup. This fact is the more remarkable, since among the American editors may be reckoned some of the best bibliographical physicians of the present age.

It has been observed by Dr. Tully, "that the quantity of the medicine which is necessary to produce sufficient vomiting in this form of the disease" (the membranific form), "is greater than will be found necessary in almost any other complaint. When the symptoms are immediately urgent, and when there is great insusceptibility to the impression of ordinary medicines, it will often be found necessary to use the per-sulphate of mercury in conjunction with the sanguinaria, or, if this is not at hand, the per-sulphate of copper, or even the sulphate of zinc."

It should be borne in mind that in all cases of any considerable severity, full vomiting with the sanguinaria at the commencement of the disease is of vast importance; and this process should be repeated as often as the symptoms may require, and in the intervals the free employment of the article, as it has already been mentioned, should be pursued.

But by advocating the pursuance of the plan of treatment I have alluded to in this paper, it is not designed to present the sanguinaria as an unfailing specific in all cases. This is more than should be expected from the use of any remedial agent. Even the quinine or the bark, which has so long sustained the character of a specific in intermittent fever, sometimes fails. All that can reasonably be anticipated from the judicious and appropriate use of any medicinal article, is that it shall generally prove successful. With this reservation, no fears are entertained but what the proper use of the sanguinaria, in each of the varieties of tracheitis, will satisfy all reasonable expectation.

HOMŒOPATHY—REPLY TO "A LOOKER ON."

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—In your Journal of November 12th, I am taken in hand for my review of W.'s Letter on Homœopathy, and a brief reply is demanded. I am charged by "A Looker On" with a "severe criticism." If by that is meant any harsh language or unfairness, I certainly beg pardon; but I am sure your readers will not so judge. There is sometimes no criticism so severe as the *truth*—which I think will prove to be the real difficulty in the present case. He says, "he was a good deal pleased with" W.'s letter; and so was I, from the fact that W. acknowledged many of the excellencies of homœopathy, while in what he objected I have shown him in error, as I shall endeavor to do again more plainly, "A Looker On" to the contrary notwithstanding. If he judges that W.'s letter is an "exposition of the whole concern," we must judge that he is not the most deeply read in homœopathic literature, though he may be in the "daily newspapers and other ephemerals with

which the press is teeming." His main drift is upon my objection to W.'s statement of three of the fundamental principles of homœopathy —which I claimed were erroneously stated—and endeavors to show that on these three points, after all, W. is right, and of course I am wrong. My answer to the other points is presumed to be satisfactory, or probably it would not be passed over silently.

Let us examine, then, more critically, the three points where we are at issue. The first is the identity of the psora of Hahnemann with *the itch*. I claimed that the homœopathic school did not believe them identical strictly. I say so now. That chronic diseases depend upon a peculiar general condition of the system, has been ever held by the homœopathic school more so than by the opposite, this morbid miasm (psora or whatever it may be) showing itself under a variety of forms and names too numerous to mention. This notion, so ridiculous, has, since the appearance of Lugol's writings, been strongly confirmed, if there is any confidence to be placed in them—for he, if anything, carries this idea farther than Hahnemann. Whoever will read these two authors, side by side, will find there is a general correspondence in their views, though using different terms. Lugol makes everything depend on a peculiar morbid state or diathesis (scrofulous), as much as Hahnemann (psoric); and it would be as reasonable to conclude, that white swelling, rachitis, ophthalmia, phthisis, amenorrhœa, hydrocephalus, and many other diseases which arise from this, are *king's evil*, as that all the affections arising from the psora of Hahnemann, are *the itch*. Hahnemann, speaking of psora, says, "It is an internal disease—a sort of internal itch, and may exist either with or without an eruption on the skin." "Such diseases as are most of the eruptions distinguished with so much care and separately denominated by Willan." Also, "Sarcomatous tumors, ramollissement of the bones, curvature of the spine," &c. &c. The tenure of his psoric doctrine as a whole is, that this is a morbid principle or miasm, pervading the constitution and developing itself in different individuals, according to circumstances, with a great variety of names, &c. But many do not even go as far as Hahnemann on this point—and that there will ever be a shade of difference of opinion upon so intangible a subject as the essence of disease, is very probable. Still this is of little practical importance.

The second and more important point at issue is, the indication of cure. Let us see who is right here. W. says, "that all diseases were cured by medicines capable of producing the *same disease* in the healthy body." I objected. "A Looker On" quotes Hahnemann to prove that W. was correct, as follows, "The curative power of medicine is founded on the property they possess of giving rise to *symptoms similar* to those of the disease," &c. So that W. contends for the *identical* disease, but Hahnemann for a train of symptoms *similar* to those manifested in the disease. I agree perfectly with Hahnemann on this point, so does every homœopathist, and deny that there is identity. If "A Looker On" cannot see a difference between the doctrine of W. and that of Hahnemann which he brings forward to sustain it, we advise him to look a little closer! I had supposed this old humbug which has been shown up time

and again, about the *same* disease and the *same* medicine—and that if a patient is poisoned with arsenic we must give arsenic to cure, &c., could not find any man stupid enough to advocate it at this time. I hold to similarity, but not to identity, and here W. was in error; then "A Looker On" has confirmed it by taking my own ground—which if he is not satisfied with he may see in another place.* His long quotation from Hahnemann is of little service to him.

The third point at issue, is not that small or infinitesimal doses will cure, for all homœopaths believe this, and not only believe it but *know* it, when appropriately administered. But the issue is on the point of W., "that a millionth part of a grain of any ordinary medicine, divided and sub-divided by some hocus pocus agitation, would produce a greater effect on the *constitution* than a *full dose* of the same." This I denied, and gave my views as I supposed so that they might be understood. Who believes, I would ask, that a millionth of a grain of opium will effect the *constitution* as much as one grain? No one. The effect on the constitution is not all that is wanted, but a change of morbid action; and this is generally done in homœopathic practice without any sensible effect upon the constitution. So is it often in allopathic. But small doses are *necessary* sometimes when the practice is strictly homœopathic. Mercury sometimes, especially in some forms of bilious affections and bowel complaints, will salivate speedily or produce other distressing pathogenetic effects, which we should avoid if we gave homœopathic doses, and cure the disease as speedily. It is homœopathic in these cases. So in others. That a medicine will be more effectual by dilution and triturating freely than before this is done, grain for grain, any one may satisfy himself. This is held to, and often we get the effect of a medicine when so prepared, which is not obtained in any other form. But it is not absolute power which is wanted—it is power only sufficient to meet the morbid action. Very much depends upon how power is applied in order to obtain effect. "A Looker On" will observe, if he reads his quotation from Hahnemann carefully, that the power of the preparation which is in the vial is developed by this process, and that only its curative power; not that the higher preparations are more active than the lower, unless the nature of disease is such as to render them better adapted to it. If he calls Hahnemann's manner hocus pocus, very well. He was accustomed to describe things as he did them, when he found they answered well. If he fancied shaking a vial *downwards* the best mode of preparation, or triturating *one hour*, or giving ten shakes instead of eleven, we have no objection. Every one for his notion on non-essential points; we care not whether a medicine is rubbed *one hour* or fifty-nine minutes, provided it is well prepared; or whether a vial is shaken ten or eleven times, downward or upward. It is the chaff that makes the show in quoting from Hahnemann. That he has said many things that are non-essential, all admit; also some things rather obscure; and as our friend seems to be rather unfortunate in understanding him, perhaps he had better examine some more recent works on the subject. Say "Principles

* Views of Homœopathy. Published by J. H. Benham, New Haven.

of Homœopathy," by Professor Henderson, of the University of Edinburgh, who has recently adopted the practice.

One word in regard to his concluding paragraph. He says, "was there any deficiency of proof, the reviewer himself has supplied it, and by example sanctioned the alleged precepts of homœopathy which he had just disavowed." What precepts of homœopathy had I disavowed which are sanctioned in the cases here referred to? Is it the doctrine of *similia similibus*, or of small doses curing disease? I certainly hold to both, and if W. had stated these as fundamental principles, we should not have been at issue. It is his misconstruction of them that has made the issue, his taking identity for similarity, and making a "millionth of a grain more powerful on the *constitution* than a *full dose*"! Now it is in misconstruing some of the fundamental points of the doctrine, which lead our brethren into these dilemmas, and this is the reason why the idea is held forth to the public, that "the half is greater than the whole," and "the millionth of a grain is more powerful upon the *constitution* than a full dose," and more of that kind of nonsense. We might charitably attribute this to either a mistake or indifference to the subject, as I did with W., who says "he is an old man and has read little on the subject." But our reviewer *claims* to be more wise, as do most who write against homœopathy. They understand the whole subject, claim that there is nothing valuable in it but has always been known—that just giving small doses, if you happen to get a medicine that looks like the disease, and if not, just as well, is all of Homœopathy—that it is the simplest matter in the world—that its practitioners are some of them "very clever fellows it is true," but are visionary and deceived, and are only fully carrying out the doctrine of Hudibras, that

> "The pleasure is as great
> In *being* cheated as to *cheat*."

We are as ignorant of who our reviewer is, as of W., since they choose to stand behind the curtain; but one thing we know, he is emphatically what he signs himself, "*A Looker On*"—nothing more, certainly.

Lowell, Ms., Dec., 1845. Yours, &c., D. Holt, M.D.

DEATH FROM THE EXCESSIVE USE OF ARDENT SPIRITS—THE PATIENT HAVING SOME PECULIARITIES OF FORMATION.

[Communicated for the Boston Medical and Surgical Journal.]

The following case, which occurred a short time since in the Mass. Gen. Hospital, under the practice of Dr. John C. Warren, is instructive as showing the fatal consequences of indulgence in the use of ardent spirits, and is curious from some of the physical phenomena which existed in the patient.

On October 25th, 1845, a man was admitted into the Massachusetts General Hospital for an injury, stated to have been produced by the kick of a horse the night before. Dr. Dale, who was present at the time of the examination of this person, said, that he had been called to him in the morning after the accident, and found him walking, or attempting to

walk, about. He learnt from the family, in which this man lived, that he was a noted drunkard, that he was in the habit of drinking about two quarts of rum daily, and that the night before, after having finished his usual potation, he crept into the stall of a horse to pass the night. The horse, disliking such a companion, either kicked, or trod upon, his right thigh, and severely injured him.

On examination of the patient, the right thigh was found very much discolored and enlarged. The knee being more discolored than any other part, was first examined. In moving the patella a crepitus was perceived, which did not appear to arise from the patella itself, but from the surface on which it was rubbed. Above the knee was a fracture of the os femoris.

The patient, on being questioned, did not give any very distinct account of the manner in which the accident happened. He admitted that he was drunk at the time, and stated that he was in the habit of drinking sometimes two, sometimes three, and sometimes four quarts of rum in a day, but the report could not be relied on. Being at this time quiet, his limb was placed in a fracture box, and carefully secured.

On the following day he was found to be in a state of violent delirium. He pulled off his splints, got out of bed, and walked, or dragged himself to the fire-place. His violence was excessive; his limbs were in constant motion, particularly that which had been injured. His cries, accompanied with oaths, imprecations, and fits of laughter, were incessant night and day.

The injury he had inflicted on the limb, taken in connection with his previous habits, made it at once appear almost certain that he must succumb, either from general exhaustion, or gangrene of the limb. A straight jacket was immediately applied to him, the head was shaved and covered with cold applications; every measure was taken to confine and secure the injured limb. Cordials were administered internally. He was directed one hundred drops of laudanum immediately, and if not relieved in an hour fifty more.

October 27th.—The delirium continued as yesterday. Finding him not relieved, he was directed to take an hundred drops of laudanum, and repeat it every hour, till some mitigation of the symptoms appeared. The cordials were continued.

After taking two doses he became tranquil, answered the questions proposed to him without being perfectly rational, and on the following morning I found him quite comfortable, with a warm perspiration, and a disposition to take the drinks offered him. These favorable appearances continued through the day, but in the night he failed very suddenly, and died in a quiet way.

In the morning an examination was made of the body.

The external appearance of the patient was that of an individual about 20 years old, but his real age was 42. He had no beard. The external organs of reproduction were small and delicate; the testes were at first supposed not to be in the scrotum, but on a careful examination something about the size of a small bean was found in the upper part of the scrotum on each side.

An incision being made into the injured knee, part of the external condyle was found to be broken off. The os femoris, three inches above the condyles, was broken into three pieces; and the limb was filled with extravasated blood. The scrotum being next examined, was found to contain diminutive testes, about one third of an inch long. Next the mammæ were dissected, and a regular mammary gland was found of the same structure with that of the female, and about two inches in diameter. The gland, of course, was more prominent, and more like that of the female than it usually is. The great cavities were next examined.

The cavity of the cranium being opened, the dura mater was seen to be without inflammation; the arachnoid coat was covered with serous exhalation, and was opaque through the greater part of its extent; the pia mater exhibited a congestion of blood in the veins at the occipital part of the cerebral surface. The whole brain was small and very firm. The upper part of the hemispheres was readily separated from the corpus callosum, so as to exhibit the whole of its connections with the cerebral lobes. By its prominence it was perceived to be filled with water, which was freely discharged on puncturing it; more than four ounces of serum existed in the ventricles and at the base of the brain. The cerebellum bore its due proportion to the cerebrum. The medulla oblongata was smaller than usual, and the medulla spinalis very firm without marks of inflammation.

Cavity of the Thorax.—The heart presented nothing remarkable. The lungs were generally adherent to the parietes of the cavity from former inflammations.

Cavity of the Abdomen.—The liver was of great size, of a pale color, indurated and granulated throughout; the gall-bladder contained watery bile. The stomach was very small, with its mucous coat corrugated into distinct eminences, which were hard, and of a livid red color. The intestines small and large were pale, and contained a quantity of air. The spleen was small. The kidneys were enlarged, hard, and granulated. The bladder was contracted to the size of a hen's egg. The prostate gland was so small, as not to be readily distinguished from the surrounding textures. The spermatic vessels and nerves presented nothing unusual. Some of the arteries, particularly the iliac and femoral, were partially ossified.

Remarks.—First, the quantity of rum said to be consumed by this individual was no doubt exaggerated. He probably did not take daily a sufficient quantity to intoxicate him, for he is said to have done his daily work, and sometimes this exceeded what was done by the other hostlers, and further, that he only got dead drunk on Saturday night. His habits had frequently reduced him to a very low state; he had been in the Hospital once or twice before, but it would seem that his physical organization was in most respects as perfect as that of other men. His death was produced by excessive excitement of the brain, and the consequent effusion of serous fluid into the cerebral cavities. The cerebral irritation was of course produced by the use of ardent spirits.

Second, the want of some of the characteristics of the male sex, and

the existence of some peculiar to the female, makes this case remarkable. The want of beard, and of the development of the organs of reproduction, constituted the first of these phenomena; the size of the mammary gland, the roundness of the hips, the whiteness and smoothness of the skin, the other. This man was married, and was said to have two children, but he separated from his wife at an early period, whether in consequence of his uncontrollable drunkenness, or any other cause, could not be satisfactorily ascertained.

Boston, December, 1845.

LACERATION OF THE LIVER DURING PARTURITION.

[Communicated for the Boston Medical and Surgical Journal.]

This case is given principally from recollection. I should premise that the patient, Mrs. B., probably from 25 to 28 years of age, some seven or eight years previous to her death, which occurred in June, 1834, was under my care for a period of about one year, laboring under disease which I supposed involved the digestive organs; particularly the *liver*. The latter organ, I supposed, was the seat of chronic inflammation, and, I thought, the principal seat of disease. The case was protracted and severe, and for a long time her recovery doubtful. She did, however, ultimately recover, apparently, a comfortable state of health. This declaration should be qualified, however, by the admission that though tolerably comfortable, there was so much remaining debility, and a delicacy of complexion, approaching to a chalky whiteness, that it did not at any time amount to firm health. Nevertheless, she was not, in my estimation, a suitable subject for medication, and consequently the case was left to its own unaided and uninfluenced development. In the mean time she had borne some two or three children, without anything occurring sufficiently important to be noticed. During the six months previous to her death I had seldom, if ever, seen her, but had learnt that she was *enceinte*, and that she was considered to be doing remarkably well. Tuesday evening, 9 o'clock, 10th June, I was notified that my services might be required during the night—and at 10, was called in haste, and informed that there was much flooding. After an examination that satisfied me that the flooding was not alarming, I gave twenty-five drops of laudanum, and in twenty or thirty minutes the flooding ceased. It should be borne in mind that she wanted, according to her own estimate, six or seven weeks of her full time, and had been, up to this time, unusually *well*, and the labor was now progressing, apparently, very favorably. The only circumstance I recollect to have learnt at the time, that could possibly lead to a suspicion of anything wrong, was, that she had complained of a *severe* and *unusual* pain, as she expressed it, *at the stomach*. This was, if I understood her aright, at the accession of labor. I should not forget to say that I found her very feeble, and that I was unable to account for it. The flooding had been less than, on former and less favorable occasions, she had borne without inconvenience. About

four hours from the time I was called, when I was expecting every moment to receive the child, the pains suddenly ceased, a profuse diarrhœa supervened, and in ten minutes after, to my utter consternation, she was a corpse. I confess, at the time, I could assign no reason—could think of no adequate cause for the event. I entertained very little expectation that an examination of the body would reveal the mystery—*so* little, that, twelve hours afterwards, I made the examination with great reluctance.

The cavity of the abdomen having been laid open, a large quantity of coagulated blood was observed, and, on looking for its source, the liver was found to be *rent*, almost literally, in twain. The condition of the liver was unlike any I had ever seen. It absolutely *melted away*, when pressed between the thumb and finger—and indeed, its whole substance was as destitute of firmness or tenacity, as the tenderest mushroom. Probably, former inflammation had resulted in adhesion of the liver to the right side, and soon after the commencement of labor, this adhesion, from efforts consequent on labor, was torn asunder, and hemorrhage was the result. This was the more profuse from the fact, that it was not merely a separation of the adhesion, but a laceration of the liver itself —extending deeply into its substance, and, no doubt, dividing its largest bloodvessels. *Possibly*, some unusual effort in walking, or otherwise, might *first* have produced the laceration, and *premature* labor might have been the consequence.

I afterwards examined the uterus, and found the stage of labor and the position of the child such as I had supposed and represented.

St. Albans, Vt., Dec. 2d, 1845. J. L. Chandler.

VACCINATION IN THE KINGDOM OF SIAM.

Bangkok, March 4th, 1845.

To the Editor of the Boston Medical and Surgical Journal.

My Dear Sir,—I wrote you a few days since a long communication on the subject of vaccination, showing my difficulties and successes in the work. In that communication I gave it as my opinion, that the difficulty of propagating kine pox in this country during our wet seasons, is in some way more connected with changes in the electrical influences, than in the moisture of the air. Since I wrote that article, this opinion has been strongly corroborated. Much of the time during the last ten days our sky has been somewhat cloudy, with some slight thunder, and considerable silent playing of lightning among the clouds. On one night we had a small shower of rain, but not enough to produce any very perceptible moisture in the earth or atmosphere the succeeding day. But my work of vaccination felt some influence at the time very severely. Out of about 100 persons in whom the vaccine virus had been inserted two or three days before, only about 50 proved successful. For several weeks immediately preceding this, I had had but very few failures, probably not

more than 1 in 15 or 20 cases. To my mind it was certain that it was not moisture that prevented my success that week; but probably some, as yet, undefinable power in the electrical influences. The same state of the atmosphere still exists; and I calculate that I shall have many failures this week. We have annually some rain at, or not far distant from, the vernal equinox, usually attended with strongly-marked electrical phenomena. I think it quite probable that I shall experience much difficulty in keeping vaccination alive during this strait. But when having passed it on to the first of April, there will then be little difficulty, I apprehend, until some time in May or the beginning of June. I write thus minutely because you have requested me to do so, and because I hope it may tend to throw light on the important question—what is the best mode of propagating the kinepox in the tropics. Yours very truly,

D. B. Bradley.

Bangkok, May 10th, 1845.

Dear Sir,—I know you will be glad to hear from me often touching my work of vaccination, for you have many times and in many ways taken a deep interest in it during the many years in which I have labored to introduce and propagate the blessing among this people. In my last I spoke of being in a narrow strait about the vernal equinox, and you will be anxious to hear how I got through it. I have the sad tale to relate, that the noble work was all shipwrecked and entirely lost on the 25th of March. Out of 32 operated upon for the kinepox the week before, there were only 6 children who took it. It so happened that all these successful cases belonged to, or were in some way connected with, the King's family, so that it was exceedingly difficult to procure matter from their arms with which to vaccinate others. With much effort my assistant persuaded one of the children to allow six other children to be vaccinated from him at the gate of the royal palace on the 25th of March. I could not rest easy at all to have all my hopes of still further propagating the kinepox lodged wholly in so few individuals and so feebly protected, and therefore made great effort, the two succeeding days, to vaccinate more persons from others of the six successful cases. But nothing I could do would induce the proprietors of the virus to allow a particle of it to be taken. Indeed, the more I exerted myself, the greater the premium offered, and the more I besought the Head Royal Physician to use his influence in the palace for me, the more the children, their parents or guardians, were frightened by some bugbear, which I cannot but think the devil had a hand in getting up that he might cut off my work. Having done what I could to protect the work at this point, I could only wait for the result of the six cases in whom the virus was inserted at the King's gate. But the prospect was so weak, that I was not much disappointed, when, after six days, I found that not one of them had taken the kinepox. I had had a very great proportion of failures for about three weeks before this. On the week of the 12th of March I had only 7 successful cases out of 37. The week before that I had 15 out of 65. After all my experience I am inclined to think, that

if I could have vaccinated from several of the last six cases, and inserted the matter into some forty or fifty children living in different quarters of Bangkok, there would have been some two or three or more successful cases among them all, and I should have carried the work safely through that strait. Hence I think it should not be said that vaccination *cannot* be propagated in Siam, even in the very worst of times. If I could but devote all my time, or even the greater part of it, to the work, I shou have but little fear that I could keep it a-going from year to year, though by no means as easily as it can be kept in America.

The whole number of successful cases of vaccination, from the 31st of July, 1844, to the 25th of March, 1845, noted in my book, is 1183. Probably many cases not noted will prove to be secure against the smallpox. The total number of cases operated upon during those eight months, will not vary far from 2000. The children and dependents of almost all the princes and nobles and officers of government, in Bangkok, have in the mean time been vaccinated. The smallpox is now, and has been for about four months, testing those cases reported as vaccinated successfully. I have heard of not a single case, marked as secured by vaccination, that has taken the smallpox. Indeed the confidence of the people in vaccination is being continually strengthened and enlarged by the influence of this terrible scourge. I am frequently hearing of this and that man's child being very sick or dead from the smallpox, because, it is said, they refused to have their children vaccinated. The Phraklang took occasion to say to me, a few days since, that I should certainly obtain very great merits in the future world for my agency in this great and good work of vaccination. This minister of state has had much confidence in it from the very first of my successful efforts to introduce it, in the year 1840. His brother, high in office, has held out in his unbelief until a month or two since, when he was brought entirely over to the faith, and had his children vaccinated. When I consider that my Lord and master has allowed me to perform this work for him, and aided me in plucking 1183 of my own race out of the fires of the smallpox, and thus prolong the lives of many hundreds of these souls, as I fondly hope, until the spirit of God shall be poured out from on high upon this land, when they with others shall be brought into his kingdom and made stars in his crown that shall shine forever and ever, my heart is almost overwhelmed with gratitude.

I intend to make efforts soon to see if I cannot procure the vaccine pustule anew from two packages of virus from you that I have still on hand, though they are some sixteen or eighteen months old. I entreat you do not fail to send me another parcel as soon as possible, and by the shortest course.

I have just closed another year of dispensary and hospital practice. During the last twelve months I have entered on my dispensary book 1300 different cases. I have had in my little hospital about 10 patients on an average at all times. I hope to find time soon to make out a little report of this department of my missionary work. My work in Midwifery is evidently preparing the way for a great reformation in obstetrical

practice in this country. You will see, from a file of the Bangkok Recorder which I have sent you, that I am publishing monthly sundry articles on anatomy and the practice of medicine and surgery. It would seem that these articles are more eagerly read than any other in that paper, and I am informed that they are sometimes copied out for the benefit of those who do not take the paper.

I read your Journal with pleasure and much profit, and it comes to me quite regularly. Yours, &c. D. B. Bradley.

CASE OF FUNGUS HÆMATODES.

By G. H. Wootten, M.D., Florence, Geo.

The extreme infrequency of such cases in the United States, induces me to prepare this brief history of one that partly came under my management. The patient, Rev. David Cox, aged about 40, of leucophlegmatic temperament, was attacked some time in the year 1840, by the disease in question. The tumor formed about midway between the trochanter major and the knee, on the external part of the thigh. In its formation it presented the usual characteristics of fungus hæmatodes, and was developed quite rapidly to the size of a cocoa nut. At this juncture Mr. Cox, acting under the advice of a gentleman of this county (Stewart) who practises medicine, submitted to an operation. The wound healed kindly, but the tumor re-appeared very soon, at the place where it was excised, and on the 1st of June, 1844, about six months subsequent to the operation, had attained to about its original size. Up to this time I am indebted to the family for the details of the case. Dr. Strawn, my co-partner, and myself, were now consulted, and requested to take control of the case. The patient was importunate for a second operation, which we discouraged, and declined performing for the following reasons: 1st, we regarded the disease as *constitutional*, and not *local*; 2nd, there were few, if any cases recorded, of success by an operation; 3rd, the previous operation not only failed, but had evidently augmented the rapidity and violence of its formation; 4th, the system gave evidence of *participation*, by the intensely inflamed, and very much enlarged condition of the inguinal glands. Had we seen the case previous to the condition of our "4th reason," we might have counselled as the only prospect of success—*amputation* of the thigh. Would it have been good practice?

The tumor in the groin (I mean the enlarged gland) continued to develope very rapidly and fearfully, and on the first of August thereafter, had acquired the dimensions of a half-bushel measure—the original one on the thigh having ceased to grow, remained the size previously indicated. The inguinal tumor now shot out fungous excrescences (till its surface was dotted all over), whose mouth resembled an inverted stocking, and over all its surface the meanderings of large veins could be distinctly traced. It now bled frequently and copiously, owing, as I presume, to the perforation of its vessels by an ulcerative action. The bleedings were controlled by *tamponing* these orifices, and by compression. The

odor it emitted was extremely offensive, rendering the sick chamber a place of absolute suffering to the attendants and visiters. I should, perhaps, remark, that in the progress of this tumor, and before its character was so well defined, we were frequently importuned by the patient to puncture it, *he* hoping and believing it to be only an abscess, contrary to our assurances. We refused to operate, but gave our consent to its being done, merely to gratify and convince him. We remarked, however, that it yielded *physical* indications of distinct *fluctuation*. He procured the services of a *botanical physician* to open it. *Blood* in small quantity was the only result of the *puncture*. After attaining the dimensions and character before described, *sphacelation* ensued, and the entire tumor sloughed out, leaving a cavity or basin that would have contained two or more gallons of fluid, with a sub-tegumentary hollow or channel, communicating with the original tumor on the thigh. Knowing that Sir Astley Cooper had reported one case of recovery, by the occurrence of the same process, we entertained some hopes that the sloughing would proceed and eradicate the original tumor, and thus save our patient. But contrary to our hopes it did not do so. The patient was now extremely emaciated, aspect *cadaverous*, breathing scarcely perceptible, voice entirely inaudible, with almost constant sleeping. At this stage, after putting him under prescriptions, the case, owing to incidental circumstances, passed to the control of another physician, and was not seen again by us, until the middle of November, a period of two months. When we again visited the patient, he had recovered his strength, the cavity left by the sloughing of the tumor had filled up kindly, but on the *margin* of the cicatrix, six or eight other tumors, about the size of lemons, had formed. The patient died about the 15th of December, with *rigors*.

During the progress of the disease, we frequently interrogated the various organs of the system to discover, if possible, whether they had taken on lesions. The most prominent evidences discovered were furnished by the *lungs*, the spinal column, and the rectum. These we briefly mention. The *expectoration* was profuse and resembled thick mucus, having a very unpleasant odor. No blood was discovered with it. *Hemiplegic paralysis* ensued, and there was tenderness upon pressing the *vertebræ*. This we made no effort to relieve, as it occurred only a few days prior to his demise. The *rectum* was the seat of excruciating pain, in voiding *fæces*, or in the escape of *flatus*. This we supposed was owing to an inflammatory action, resulting from the contiguity of the tumor. It would seem useless to give in detail the system of medication adopted in the management of this case. Suffice it to say, that we directed *opiates* in sufficient quantities to lull the suffering; *wine* and *ammonia* to support the patient under the sloughing process; *elixir vitriol* to control the colliquative sweats; *saline aperients* to keep the bowels gently open; and the *pyroligneous acid* locally, to correct the fœtor of the exhalations. We should perhaps mention the fact, that the patient was also visited occasionally by Dr. Hay, of this county.—*Southern Medical Journal.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, DECEMBER 17, 1845.

Prisons and Prison Discipline.—Efforts have been making, for years, to better the condition of prisoners, both physically and morally; but with what success, the criminal calendars of this country and Europe clearly show. Crime is certainly on the increase, though perhaps in a ratio only with the increase of population. However, philanthropists have undertaken the culture of a field that had been entirely neglected from the earliest history of civilization till the last century, and they have found it thickly beset with brambles, thorns and weeds. A single discovery which has been made gives marked importance to the labors of a comparatively modern school of benevolent operators, of vastly more value than ordinary sympathizers with unfortunate, morally depraved humanity, seem to suspect; viz., that the law of kindness is better than a rod, and that soft words turn away anger. The theory of this doctrine was promulgated thousands of years ago. A practical illustration, however, of its true value in governing vicious and ignorant convicts was developed by Howard and the late excellent Mrs. Frye, in England, and in the United States by Mr. Dwight and his associates, and also by the most devoted, self-sacrificing of all American philanthropists, Miss D. L. Dix, of Boston.

These reflections were engendered by an examination of a large pamphlet from the pen of this lady, entitled—"Remarks on Prisons and Prison Discipline in the United States," which does honor to her head and heart; and her investigations must go down to posterity, an imperishable memorial of her devotion to the best interests of the outcasts of society—the tenants of all orders of prisons. She does not herald her reports abroad under the imposing influence of a board of trustees, accompanied by a catalogue of life-members at a hundred dollars a-piece; but with an independence of spirit and circumstances quite rare in this land of chartered rights, where making either railroads, or mutton broth for the poor, is ordinarily regulated by an act of the General Court, Miss Dix travels, examines, and writes about what she sees, and how she feels about the discoveries she has made, at her own expense. The echo of her trumpet, therefore, is no common sound in the ears of the listening public.

There is one feature in the writings of this woman, which is at variance with our individual notions of what is best for the prisoner. She looks to his moral restoration to society, with an unimpaired body and renovated spirit. Her opinions, therefore, are calculated to influence legislators in regard to the future management of prisons. She is all charity, and were those whom she addresses equally overflowing with the milk of human kindness, the aspect of the world would be materially changed. It is evident that Miss Dix looks favorably upon solitary confinement. A prisoner should be boxed up, in her view, in a cell, like an antediluvian frog in a piece of shale, wholly and entirely beyond the reach of any society. He should never hear nor see a fellow mortal, during the destined period of incarceration. All the while he should labor as direct-

ed; yet under all circumstances commune alone with his own thoughts, save when directed to higher aspirations, through the silent teachings of such books as are permitted to be in his legal grave.

While granting Miss Dix, therefore, the meed of praise for untiring exertions and honesty of purpose in behalf of the prisoner, we are equally earnest in differing from her on this momentous topic. Having expressed our views on this subject a month or two since, it is by no means worth while to repeat them here. We fervently pray that the fair authoress may live to accomplish even more than she has already achieved; but she shows but little knowledge, in our estimation, of the social constitution of her race, to advocate a system so destructive as solitary confinement. There may indeed be cases, such as Miss Dix has cited, in which the criminal was the mental gainer, by being walled up in his cell without a door—but they must be rare, or criminals and outlaws have been misrepresented, and their deceptions taken for fundamental principles.

Belonging to these considerations there are other subjects to be discussed, which have not been sufficiently the theme of her deliberations. Air, exercise, digestion, quality and measure of food; punishments for infractions of rules, evil practices nurtured in loneliness, and, lastly, the permanent effects which a long confinement, solus, under physical restraints, produces on the mind, are all to be weighed in a balance with more care than they have yet received, before any one should subscribe to the visionary doctrine that solitary imprisonment is the best method of reclaiming all or any description of criminals.

Public Health in China.—Notwithstanding the low state of medicine in that empire, according to Mr. Peters, the state of public health is not so bad as might be supposed when it is remembered astrology is very intimately connected with the administration of remedies. The art of healing at the present moment in China is just about what it was in Europe two hundred years ago. But little, in reality, is known of their materia medica. They have several preparations of mercury, however, and other minerals, which are prescribed pretty judiciously in some diseases. Ginseng, after all, is the panacea for every human disability—and through all revolutions of public sentiment, in regard to other things, is still regarded as the great and sovereign remedy in all maladies and under all aspects of the stars, or phases of human woe. At one time it brought eight times its weight in silver. Vermont and New Hampshire have furnished immense quantities, procured annually by children and poor people, in the forests. Being dried, cleaned, and made by some process to resemble clarified horn, it is fit for the Canton market. Very large profits have been realized from the exportation of ginseng, and large fortunes accumulated by a few quiet individuals. The preciousness of the article obliges those who resort to it for its remedial powers, to take very small doses—quite vying with homœopathists in the size of their pills and powders.

Castleton Medical College.—The public exercises in connection with the close of the autumnal session of this institution, took place on Wednesday, the 26th ult. The valedictory address to the graduating class was

delivered by Professor Perkins, President of the College. The address, like other productions from the same source, was a specimen of sound instruction and council affectionately received by a large class about to go forth and encounter the responsibilities and perils of the profession.

The degree of Doctor of Medicine was conferred on 36 young gentlemen, of whom 14 were residents of Vermont; 13, of New York; 2, of Pennsylvania; 1, of Georgia; 1, of South Carolina; 1, of North Carolina; 1, of Mass.; 1. of Conn.; 1, of Maine; and 1, of N. Hampshire.

The honorary degree of Doctor of Medicine was conferred on H. H. Toland, M.D., of S. C.; Drs. Ira Spencer and Thomas Dunton, of N. York.

The number of students who attended the last course of lectures was 140.

Swedenborg's Knowledge of Anatomy and Physiology.—Prof. Bush, of New York, a bold, energetic expounder of the theological doctrine of the resurrection, has lectured in Boston to a delighted audience upon the scientific attainments of Emanuel Swedenborg. For ourselves, we frankly confess that the light which was shed by Prof. Bush on the writings of that illustrious savan, was both new and surprising. Swedenborg's astonishing attainments in anatomy and physiology were the most remarkable of all his acquirements, having in view, as he did, an explanation of the problem of the intimate connection of the body and soul. He was evidently a century in advance of the age in which he lived, in those departments of science, as his views have been verified by the developments of the present time. Why do we not have these particular works of his?

Southern Resort for Invalids.—The attention of readers is directed to Dr. Wilder's advertisement in to-day's Journal. Dr. W. formerly had an institution for invalids in the town of Groton, in this State, and we believe gave good satisfaction to all who placed themselves under his care. We believe him well qualified for taking charge of a place at the South for Northern invalids, and such a place, in the hands of such a man, seems needed. We take pleasure in recommending both to those who may be compelled by ill health to leave the chill winds of our Northern climate for the more genial temperature of a Southern sky.

Change of Color in the Hair. By J. Sykes, M.D., St. Louis.—Peter Sprinkle, now aged 81, is a native of Little York, Penn. He emigrated to Illinois some thirty years since. He is a most remarkably robust, hale man; erect in his carriage, and would not be supposed to have passed his sixtieth year. He was a captain under Gen. Wayne, in his first battle with the Indians on the Great Miami, and in that conflict lost the hearing of one of his ears, which has never been restored.

The particulars of his case are the following: his hair, within a *few years*, from being perfectly *white*, has become nearly black, indeed the black greatly predominates; he wears a long beard, descending nearly to his breast, which is similarly changed, and, to use his own words, he has no doubt, from the rapidity of the change, it will soon be as black as in his early youth.

I regretted that I had no means of examining it with a powerful microscope, as some singular facts might have been developed. He has, also, for some fifteen or twenty years, ceased the use of spectacles, and now sees to read the finest print without difficulty or inconvenience.

Medical Miscellany.—Some of the papers are saying—when arsenic has been swallowed, powdered charcoal should be taken in any quantity, as speedily as possible. No reason is given.—The Duke of Wellington, it seems, is opposed to the temperance reformation, in the army at least. —A rogue, in Paris, recently sentenced to one year's imprisonment, scarified his arms, sucked the blood, and under circumstances calculated to excite sympathy, ejected it from the stomach, so that he appeared to have a copious hemorrhage from that organ.—Medical practitioners are much wanted in China, and those already there are profiting largely, say the papers.—Dr. Davis, a physician, who was educated to the profession in Baltimore, is Speaker of the House of Representatives, in Congress—and Dr. Lane, Sergeant at Arms. Mr. Girdler, of Marblehead, has been appointed steward of the Mass. General Hospital.—Dr. R. H. Borroughs has been elected mayor of the city of Savannah, Geo.

Erratum.—In Dr. Hubbard's communication, in last week's Journal, at page 382, line 1st, instead of "connected with the heart," read, connected with the rent.

To Correspondents.—Dr. Abell's extraordinary account of optical illusions in his own person, Dr. Williams on Puerperal Convulsions, and Dr. Woodruff's remarks on a case referred to in Dr. Ellsworth's Prize Essay, have been received. An answer to some queries of a correspondent respecting the publications of the Massachusetts Medical Society, has been deferred in order to obtain further information. It will be given next week.

Married,—In Boston, Dr. Albert C. Eaton to Miss A. Morrow.—Dr. Orin Kibbe, of Boston, to Miss H. A. Wood.

Died,—At Philadelphia, Dr. H. G. Ford, of apoplexy, a native of New Hampshire.—At Newburyport, Mass., Dr. John A. Briggs, 29.— At Newington, Conn., Chauncey Beldin, M.D.

Number of deaths in Boston, for the week ending Dec. 13, 34.—Males 19, females 15. Stillborn, 4.
Of consumption, 7—inflammation of the stomach, 1—hooping cough, 2—scarlet fever, 3—brain fever, 1—smallpox, 3—convulsions, 3—inflammation of the brain, 1—typhus fever, 3—lung fever, 1—inflammation of the lungs, 1—paralysis, 1—marasmus, 1—disease of the heart, 1—croup, 2—old age, 2—teething, 1.
Under 5 years, 18—between 5 and 20 years, 2—between 20 and 60 years, 11—over 60 years, 3.

REGISTER OF THE WEATHER,

Kept at the State Lunatic Hospital, Worcester, Mass. Lat. 42° 15′ 49″. *Elevation* 483 *ft.*

Nov.	Therm.		Barometer.		Wind.	Nov.	Therm.		Barometer.		Wind.
1	from 54 to 70		from 28.99 to 29.24		S W	16	from 33 to 52		from 29.00 to 29.15		S W
2	52	55	29.02	29.06	N E	17	36	58	29 32	29.35	W
3	57	62	28.98	29.00	S E	18	45	60	29.42	29.43	S W
4	58	69	29.00	29.04	S E	19	50	60	29.09	29.20	S W
5	42	49	28.99	29.09	S W	20	43	56	29.00	29.12	S W
6	34	48	29.16	29.20	S W	21	42	49	28.85	28.95	N W
7	39	52	29.11	29.18	N W	22	32	43	29.22	29.32	W
8	36	46	29.13	29.16	S W	23	42	56	28.83	29.13	S W
9	48	52	28.64	28.78	N E	24	28	34	29.33	29.52	N W
10	34	43	28.35	28.83	N W	25	19	39	29.68	29.77	S W
11	40	54	29.15	29.24	W	26	30	45	29.74	29.75	S W
12	38	40	29.32	29.39	N W	27	40	50	28.70	29.20	S W
13	32	50	29.34	29.48	S W	28	20	27	29.09	29.42	N W
14	40	57	28.98	29.09	S W	29	12	30	29.82	29.94	N W
15	37	42	29.14	29.30	N W	30	20	30	29.76	29.88	N E

The month of November has been unusually pleasant. There have been many fine days—warm and calm, unlike the general character of this month. A large amount of rain has fallen, and yet the springs are low. The fields have been more verdant than in August; the amount of "fall feed" extremely favorable to the husbandman. Range of the Thermometer from 12 to 70. Barometer, from 28.35 to 29.94. Rain, 6.77 inches—Snow 4 inches.

Vinegar in Cases of Narcotic Poisoning.—Dr. Clapp finds vinegar an excellent adjuvant to emetics, in cases where narcotics have been taken into the stomach in doses to overcome the excitability of that organ. He succeeded in bringing on vomiting by administering this acid when the emetic was about to fail. He mentioned to us the following instances. A man, in a fit of mental despondency, swallowed an ounce of laudanum on an empty stomach. In about an hour he was visited by Dr. Clapp, and was found insensible, with stertorous, convulsive breathing. Sulphate of zinc was administered to the extent of one hundred grains, and his fauces were tickled with a feather, but vomiting was not induced. The doctor gave him a pint of vinegar; emesis soon took place, with the relief of all the alarming symptoms.

Two children swallowed a number of seeds of the stramonium at different times. In the case of the first, the ordinary means of exciting emesis were tried ineffectually, and the child died. In the second, vinegar was given, free emesis was the result, and the patient recovered.

These facts are valuable, and a knowlege of them may save the lives of many individuals. We know how often children are sacrificed by the indiscreet use of opiates, and how frequent cases of poisoning by opium, the Jamestown weed, &c., are becoming in this country. If vinegar gives activity to emetics in such cases, it is an important auxiliary. Let it be tried.—*Western Medical Journal.*

Of the Manufacture of Enamelled Cast Iron Vessels.—Iron pots, and especially those of enamelled cast iron, are very extensively used in domestic economy. To enamel these vessels, they are cleaned as perfectly as possible with weak sulphuric acid, then washed with cold water, and dipped in a thin paste made with quartz first melted with borax, felspar, and clay free from iron, then reduced to an impalpable powder, and sufficient water added to form a rather thin paste. These vessels are then powdered in the inside with a linen bag, containing a very finely-pulverized mixture of felspar, carbonate of soda, borax and a little oxide of tin. Nothing then remains but to dry the pieces, and heat them in an enamelling furnace. The coating obtained is very white, resists the action of fire without cracking, and completely resists acid or alkaline solutions.—*Chemical Gazette.*

On Benzoline, a new Organic Salt-base obtained from Oil of Bitter Almonds. By George Fownes, Esq., F.R.S.—Pure oil of bitter almonds is converted, by the action of a strong solution of ammonia, into a solid white substance having a crystalline form, and which was termed by M. Laurent *hydrobenzamide.* The author found that this substance, by the further action of alkalies, became harder and less fusible than before, and not differing in chemical composition from the original substance, but exhibiting the properties of an organic salt-base. To this substance the author gives the name of *benzoline.* He finds that the salts which it forms by combination with acids are, in general, remarkable for their sparing solubility; and that many of them, as the hydrochlorate, the nitrate and the sulphate, are crystallizable. Of the properties of these salts the author gives a detailed account.—*Ibid.*